#### PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS AND SIGNS AND SIDEWALK RAMP RECONSTRUCTION AT THE INTERSECTION OF MD 212 (POWDER MILL ROAD) AND MONTGOMERY ROAD/34TH PLACE IN PRINCE GEORGES COUNTY. MD 212 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

#### INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA FIVE-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR NORTHBOUND MD 212 AND AN ALTERNATE PEDESTRIAN PHASE FOR THE NORTH LEG OF THE INTERSECTION. NO PHASE CHANGES ARE PROPOSED AS PART OF THIS PROJECT.

#### CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. AN APS CENTRAL CONTROL UNIT WILL BE SUPPLIED BY THE CONTRACTOR AND INSTALLED BY SHA.

CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

MR. BRIAN YOUNG ASSISTANT DISTRICT ENGINEER-TRAFFIC PHONE: (301) 513-7358

MR. AUGIE REBISH UTILITY ENGINEER PHONE: (301) 513-7350

MR. WAYNE A. MOWDY ASSISTANT DISTRICT ENGINEER-MAINTENANCE PHONE: (301) 513-7304

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR. CHIEF, TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF TRAFFIC OPERATIONS 410-787-7630

MR. ED RODENHIZER CHIEF, SIGNAL OPERATIONS 410-787-7650

MR. EUGENE BAILEY CHIEF, SIGN OPERATIONS 410-787-7676

THE POWER COMPANY IS:

ROCKVILLE SERVICE CENTER 201 WEST GUDE DRIVE ROCKVILLE, MD 20850 301-670-8700

#### EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.

DESCRIPTION

UNIT QUANTITY

SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGNS TO CONSIST OF:

> 2 EA R10-3(1) (9"X15") - POWDER MILL RD 2 EA R10-3(1) (9"X15") - MONTGOMERY RD

1 EA SHIELD ASSEMBLY (48" X 75") - M3-2, M1-5(1), M6-1

1 EA SHIELD ASSEMBLY (30" X 51") - M3-4, M1-5(1), M6-1

## EQUIPMENT LIST

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR. DESCRIPTION ITEM NO. QUANTITY MAINTENANCE OF TRAFFIC EΑ CLASS II EXCAVATION CY TEST PIT EXCAVATION CY LF F&I STD. TYPE A COMBINATION CURB AND GUTTER 12" GUTTERPAN 8" DEPTH 6004 F&I 4" CONCRETE SIDEWALK SF 742 SF F&I DETECTABLE WARNING SURFACE FOR CURB RAMPS 58 EΑ F&I 2 WIRE CENTRAL CONTROL UNIT F&I AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION EΑ 2 EA R10-3(1) (9"X15") - POWDER MILL RD 2 EA R10-3(1) (9"X15") - MONTGOMERY RD 8014 F&I LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEADS EΑ LF 30 DISCONNECT, PULL BACK AND RE-ROUTE CABLES 55 F&I SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - TRENCHED LF 45 NO. 6 AWD STRANDED BARE COPPER GROUND WIRE INSTALL OVERHEAD SIGN CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE EΑ ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG) LF 580 LF 170 ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) RELOCATE EXISTING PEDESTAL POLE (INCLUDES CONCRETE) EΑ

\*\* TO BE PAID AS ITEM 8012 INSTALL PED POLE

# EQUIPMENT LIST

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA. ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

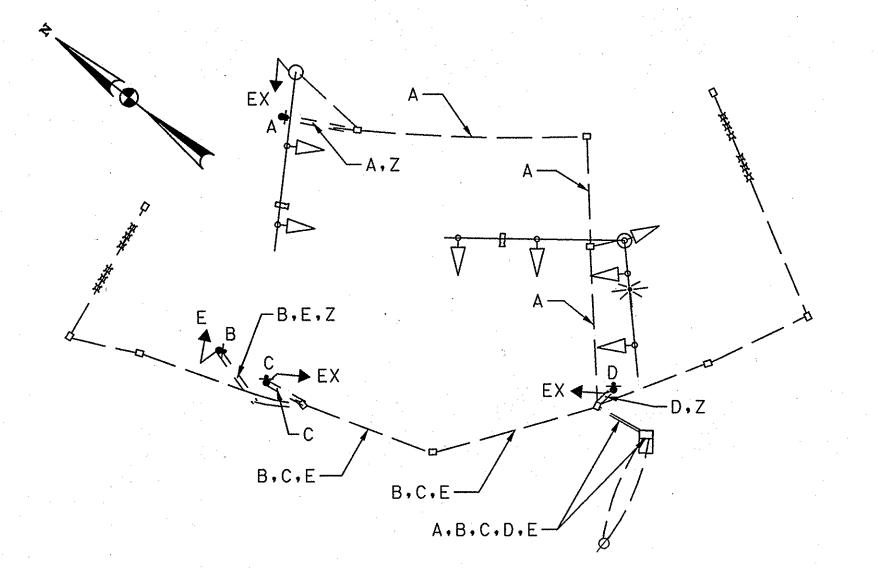
# PHASING CHART

NO PHASE CHANGE

## GENERAL NOTES

- 1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
- 3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL
- 6. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
- 7. LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- 8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHERE CHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- 9. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- 10. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- 11.TRAFFIC SIGNAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF SIGNAL EQUIPMENT WITH THE SIDEWALK CONTRACTOR.

WIRING DIAGRAM



WIRING KEY A,B,C,D 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

EXISTING 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

SCALE NA ADVERTISED DATE

DESIGNED BY \_\_\_\_TC

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 212 (POWDER MILL ROAD) AT MONTGOMERY ROAD/34TH PLACE BELTSVILLE, MARYLAND

CONTRACT NO. \_\_\_\_AT91335185

COUNTY PRINCE GEORGE'S

GENERAL INFORMATION SHEET



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LOGMILE 16021208.97 CHECKED BY \_\_\_\_\_ D. EBY TIMS NO. 1914 F.A.P. NO. TOD NO. \_\_\_ TS NO. 245F-GI DRAWING SHEET NO. 4 OF 9

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